

FIG. 1

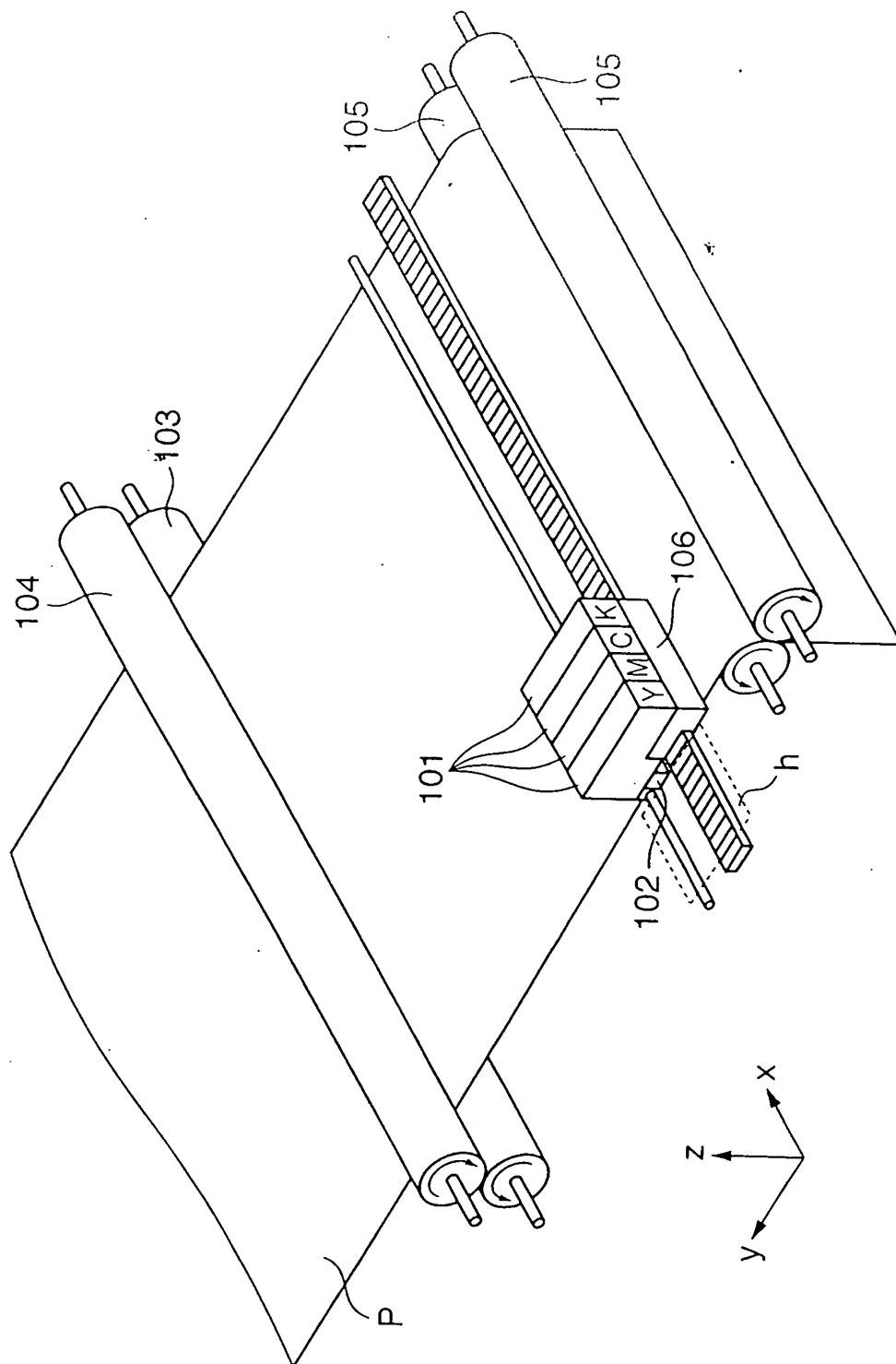


FIG. 2

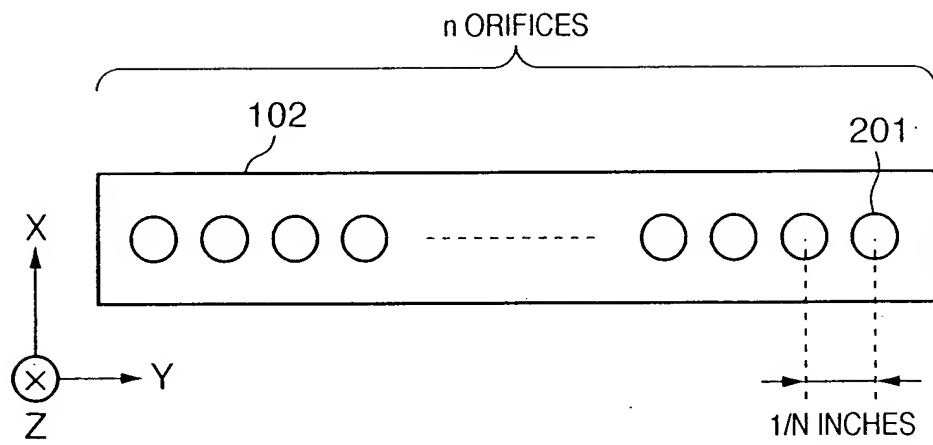
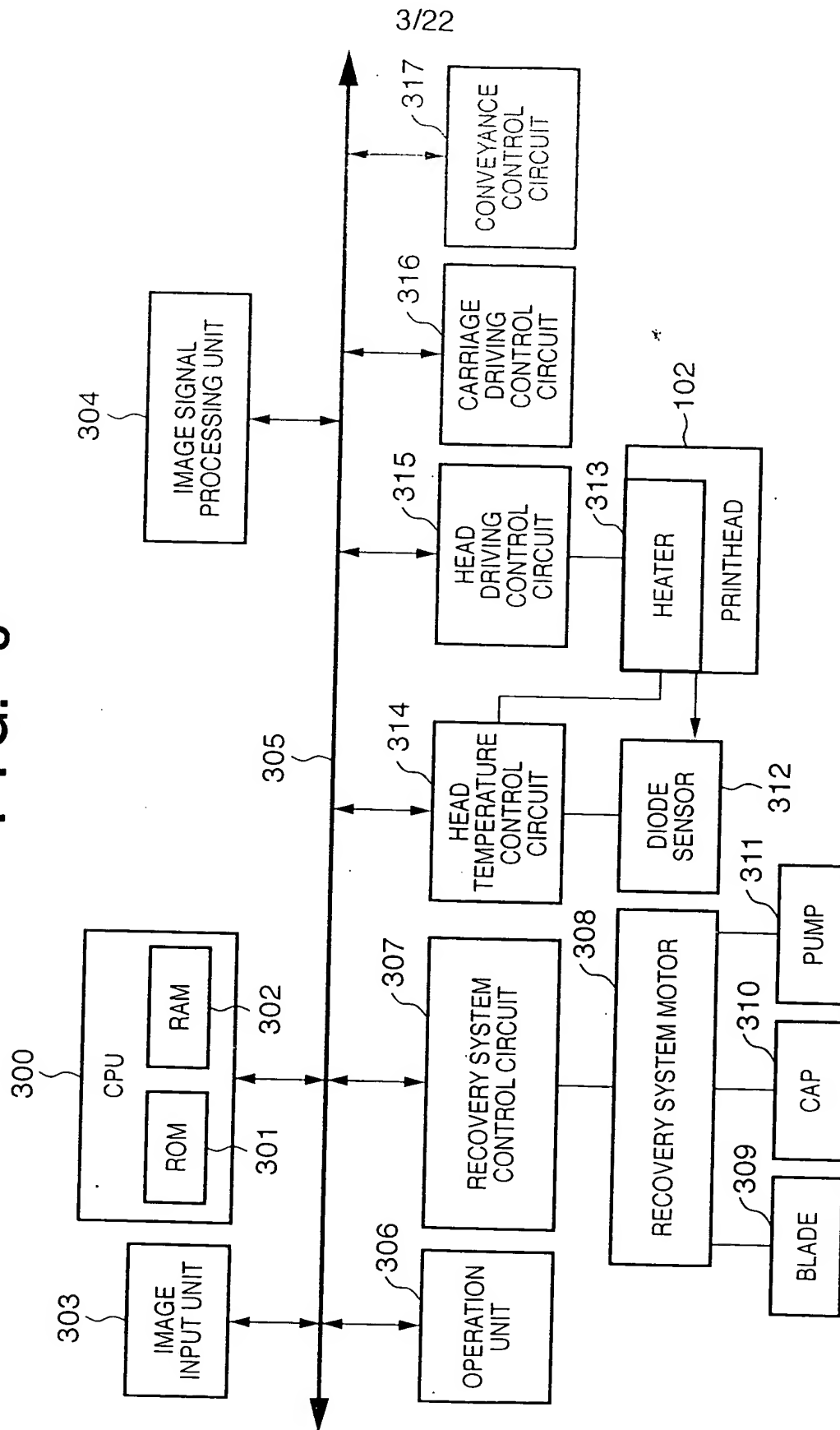
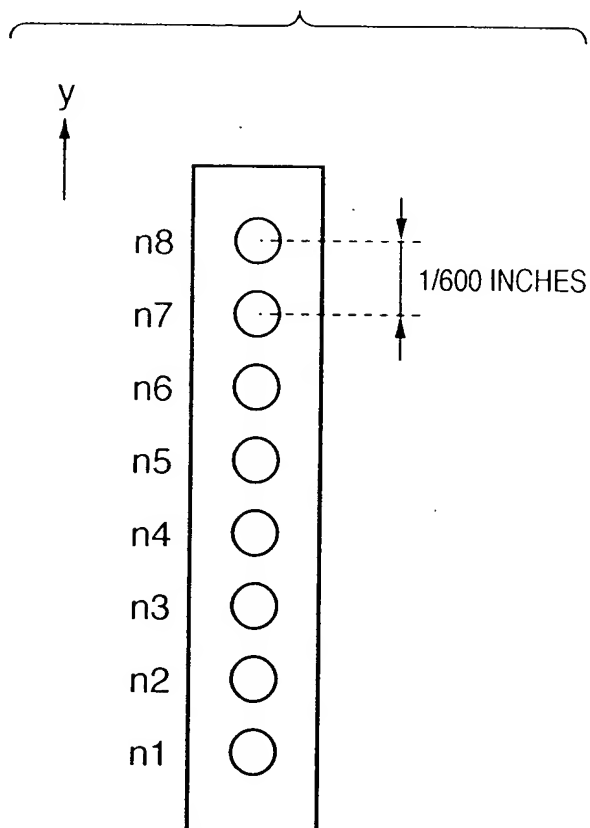


FIG. 3



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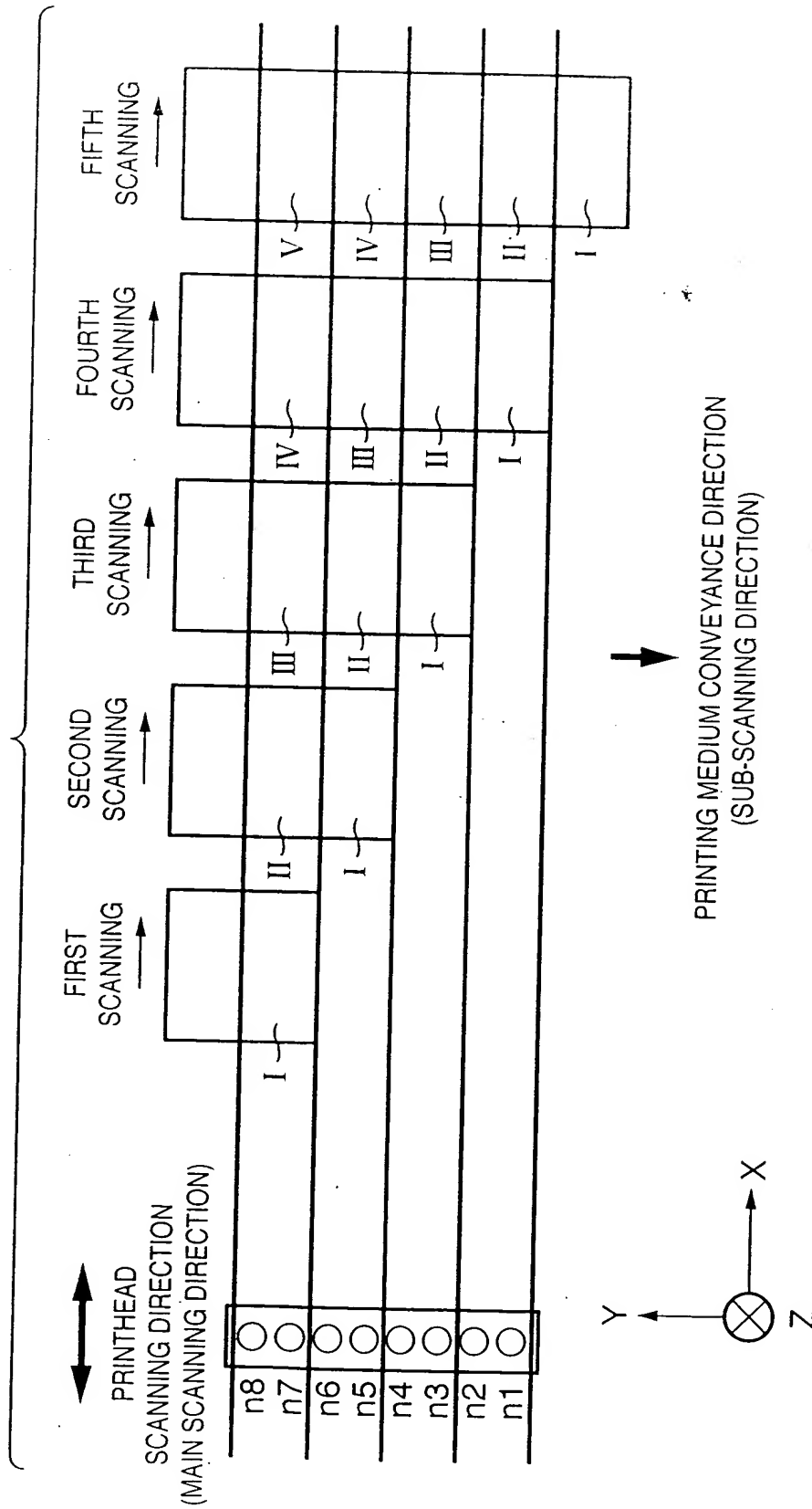
FIG. 4



**FIG. 5**

QUANTIZATION LEVEL	NUMBER OF PRINTING DOTS	PIXEL DATA
0	0	· 0000
1	1	· 0001 · 0010 · 0100 · 1000
2	2	· 0011 · 1010 · 0101 · 1100 · 0110 · 1001
3	3	· 0111 · 1011 · 1101 · 1110
4	4	· 1111

FIG. 6



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FIG. 7A

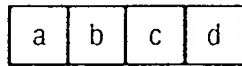


FIG. 7B

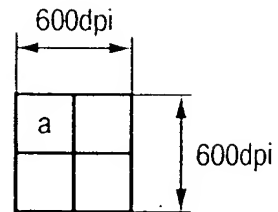

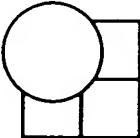
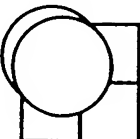
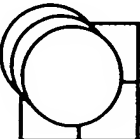
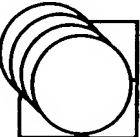
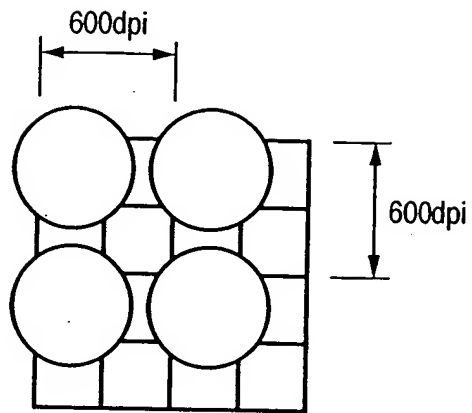


FIG. 7C

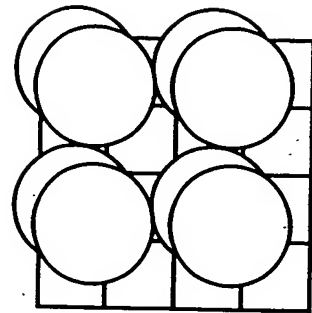
QUANTIZATION LEVEL	DOT LAYOUT (INK DROPLET ADHERING POSITION)
0	
1	
2	
3	
4	

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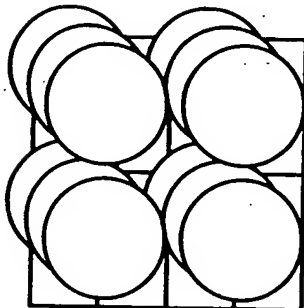
**FIG. 8A**



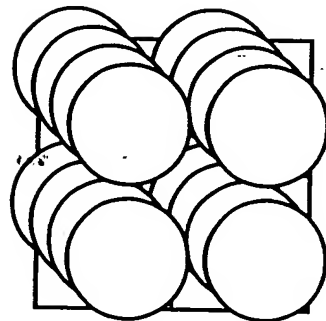
**FIG. 8B**



**FIG. 8C**

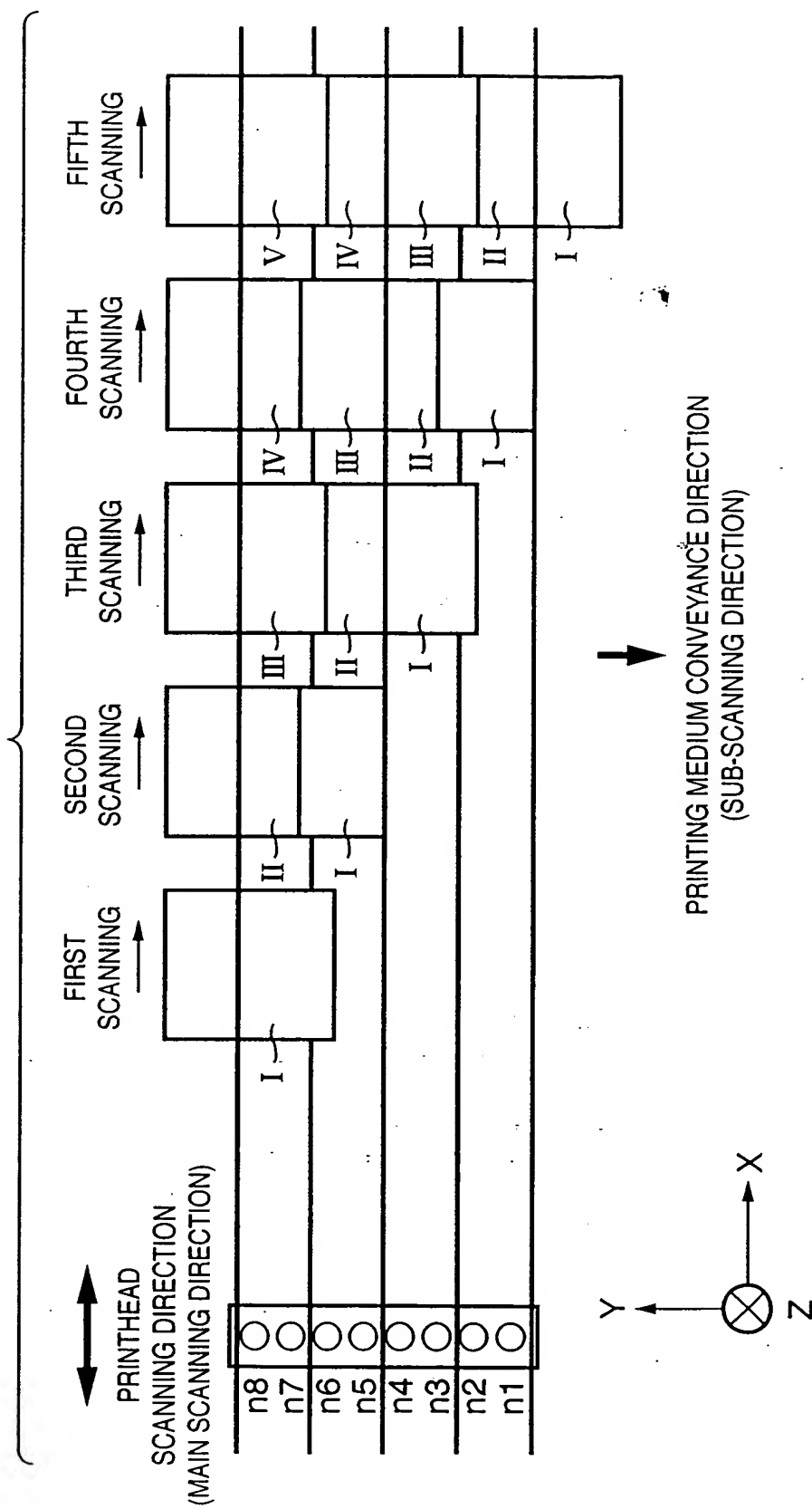


**FIG. 8D**



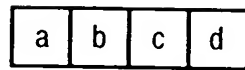


9514

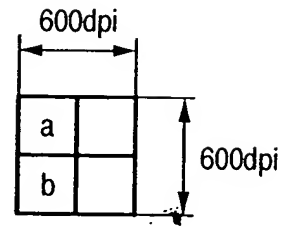


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**FIG. 10A**



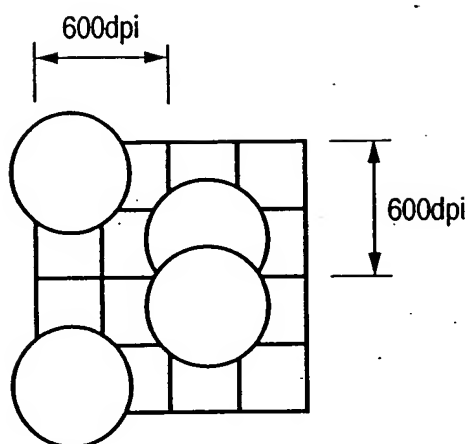
**FIG. 10B**



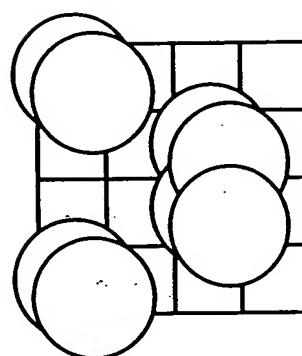
**FIG. 10C**

QUANTIZATION LEVEL	DOT LAYOUT (INK DROPLET ADHERING POSITION)
0	A 2x2 grid of squares, representing the base layout for quantization level 0.
1	Two 2x2 grids. In the first grid, the top-left square contains a circle. In the second grid, the bottom-left square contains a circle.
2	Three 2x2 grids. In the first grid, the top-left and bottom-left squares contain circles. In the second grid, the top-left and bottom-right squares contain circles. In the third grid, the top-right and bottom-left squares contain circles.
3	Four 2x2 grids. In the first grid, the top-left, bottom-left, and top-right squares contain circles. In the second grid, the top-left, bottom-left, and bottom-right squares contain circles. In the third grid, the top-left, top-right, and bottom-left squares contain circles. In the fourth grid, the top-right, bottom-left, and bottom-right squares contain circles.
4	Five 2x2 grids. In the first grid, all four squares (top-left, bottom-left, top-right, bottom-right) contain circles. In the second grid, the top-left, bottom-left, and top-right squares contain circles. In the third grid, the top-left, top-right, and bottom-left squares contain circles. In the fourth grid, the top-right, bottom-left, and bottom-right squares contain circles. In the fifth grid, the top-left, bottom-left, and bottom-right squares contain circles.

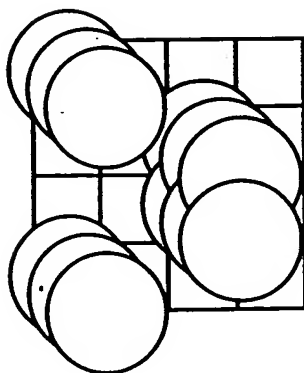
**FIG. 11A**



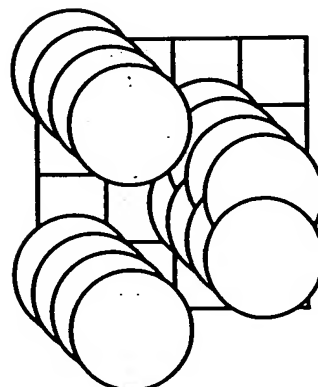
**FIG. 11B**



**FIG. 11C**



**FIG. 11D**

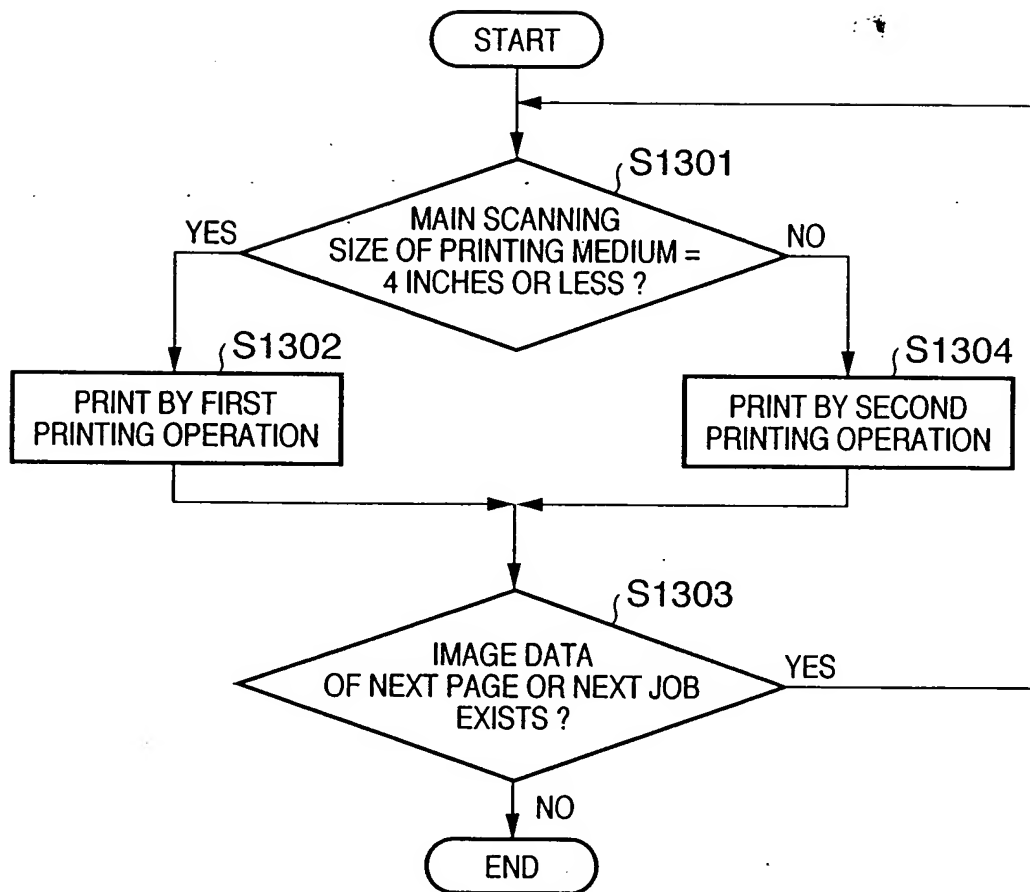


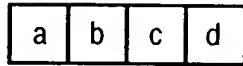
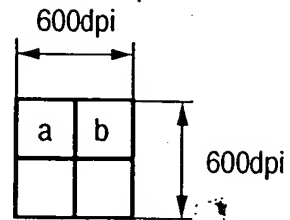
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**FIG. 12**

	MAIN SCANNING SIZE OF PRINTING MEDIUM	DENSITY UNEVENNESS IN MAIN SCANNING DIRECTION AND SUB-SCANNING DIRECTION	GRAININESS
FIRST PRINTING OPERATION	3 INCHES	◎	○
	4 INCHES	○	○
	5 INCHES	△	○
	6 INCHES	×	○
	7 INCHES	×	◎
	8 INCHES	× ×	◎
SECOND PRINTING OPERATION	3 INCHES	◎	△
	4 INCHES	○	△
	5 INCHES	○	○
	6 INCHES	○	○
	7 INCHES	○	○
	8 INCHES	○	○

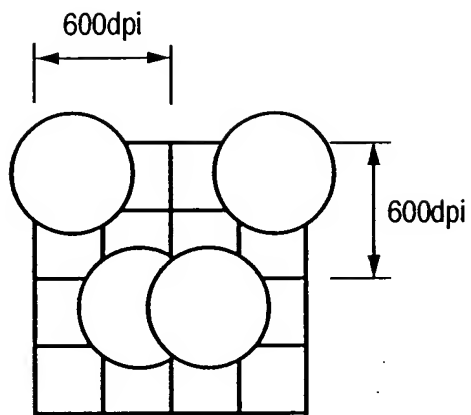
FIG. 13



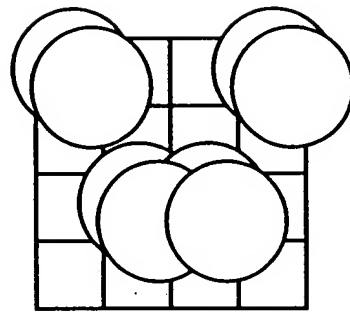
**FIG. 14A****FIG. 14B****FIG. 14C**

QUANTIZATION LEVEL	DOT LAYOUT (INK DROPLET ADHERING POSITION)
0	A 2x2 grid of squares, representing the base layout for quantization level 0.
1	Two 2x2 grids of squares. In each grid, a circle is positioned in the top-left square, representing the first quantization level.
2	Three 2x2 grids of squares. In each grid, two overlapping circles are positioned in the top-left square, representing the second quantization level.
3	Four 2x2 grids of squares. In each grid, three overlapping circles are positioned in the top-left square, representing the third quantization level.
4	Five 2x2 grids of squares. In each grid, four overlapping circles are positioned in the top-left square, representing the fourth quantization level.

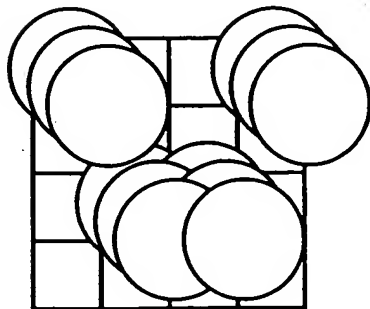
**FIG. 15A**



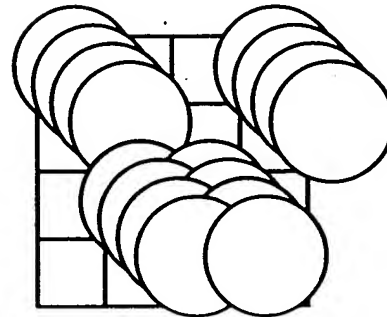
**FIG. 15B**



**FIG. 15C**



**FIG. 15D**



**FIG. 16**

	SUB-SCANNING SIZE OF PRINTING MEDIUM	DENSITY UNEVENNESS IN MAIN SCANNING DIRECTION AND SUB-SCANNING DIRECTION	GRAININESS
FIRST PRINTING OPERATION	5 INCHES	◎	○
	6 INCHES	○	○
	7 INCHES	△	○
	8 INCHES	×	○
	9 INCHES	×	◎
	10 INCHES	× ×	◎
SECOND PRINTING OPERATION	5 INCHES	◎	△
	6 INCHES	○	△
	7 INCHES	○	○
	8 INCHES	○	○
	9 INCHES	○	○
	10 INCHES	○	○



FIG. 17

	SUM OF MAIN SCANNING AND SUB-SCANNING SIZES OF PRINTING MEDIUM	DENSITY UNEVENNESS IN MAIN SCANNING DIRECTION AND SUB-SCANNING DIRECTION	GRAININESS
FIRST PRINTING OPERATION	8 INCHES	◎	○
	10 INCHES	○	○
	12 INCHES	△	○
	14 INCHES	×	○
	16 INCHES	×	◎
	18 INCHES	× ×	◎
SECOND PRINTING OPERATION	8 INCHES	◎	△
	10 INCHES	○	△
	12 INCHES	○	○
	14 INCHES	○	○
	16 INCHES	○	○
	18 INCHES	○	○

FIG. 18

	MAIN SCANNING PRINTING SIZE OF IMAGE DATA	DENSITY UNEVENNESS IN MAIN SCANNING DIRECTION AND SUB-SCANNING DIRECTION	GRAININESS
FIRST PRINTING OPERATION	3 INCHES	◎	○
	4 INCHES	○	○
	5 INCHES	△	○
	6 INCHES	×	○
	7 INCHES	×	◎
	8 INCHES	× ×	◎
SECOND PRINTING OPERATION	3 INCHES	◎	△
	4 INCHES	○	△
	5 INCHES	○	○
	6 INCHES	○	○
	7 INCHES	○	○
	8 INCHES	○	○

FIG. 19

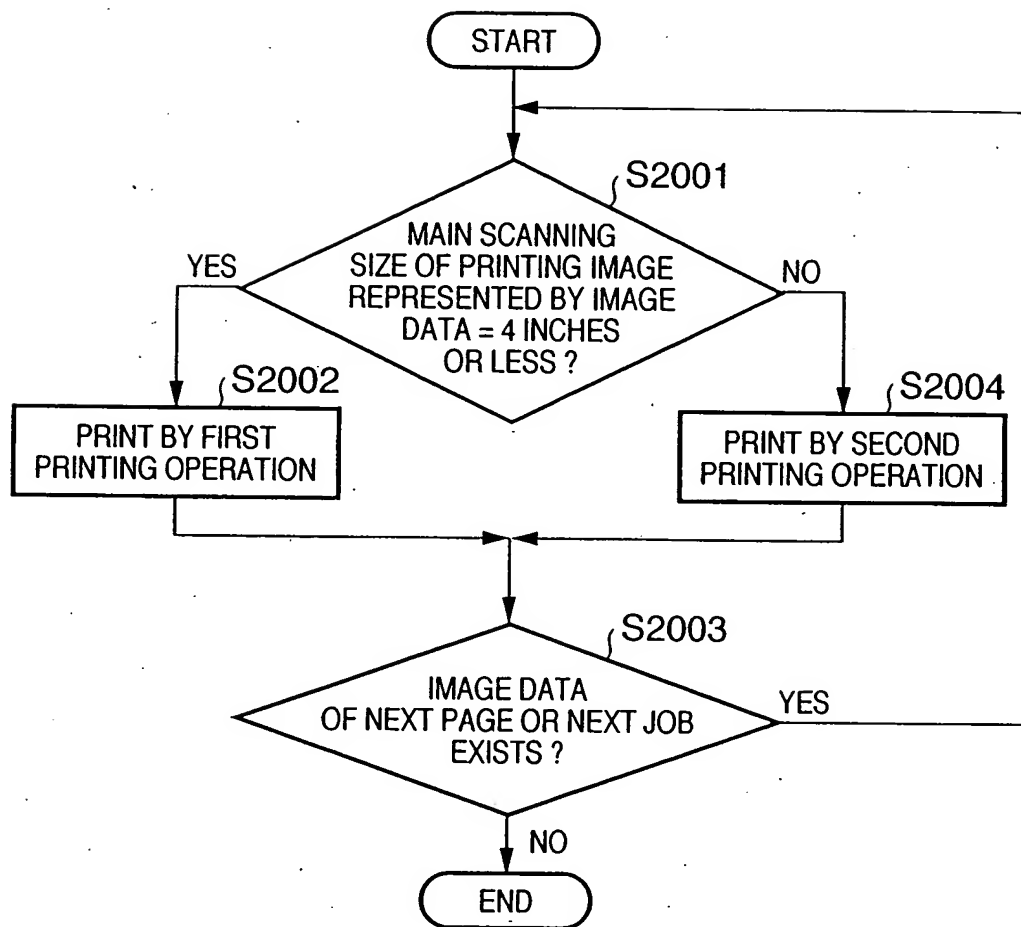


FIG. 20

	SUB-SCANNING PRINTING SIZE OF PRINTING DATA	DENSITY UNEVENNESS IN MAIN SCANNING DIRECTION AND SUB-SCANNING DIRECTION	GRAININESS
FIRST PRINTING OPERATION	5 INCHES	◎	○
	6 INCHES	○	○
	7 INCHES	△	○
	8 INCHES	×	○
	9 INCHES	×	◎
	10 INCHES	× ×	◎
SECOND PRINTING OPERATION	5 INCHES	◎	△
	6 INCHES	○	△
	7 INCHES	○	○
	8 INCHES	○	○
	9 INCHES	○	○
	10 INCHES	○	○

FIG. 21

	SUM OF MAIN SCANNING AND SUB-SCANNING PRINTING SIZES OF PRINTING DATA	DENSITY UNEVENNESS IN MAIN SCANNING DIRECTION AND SUB-SCANNING DIRECTION	GRAININESS
FIRST PRINTING OPERATION	8 INCHES	◎	○
	10 INCHES	○	○
	12 INCHES	△	○
	14 INCHES	×	○
	16 INCHES	×	◎
	18 INCHES	× ×	◎
SECOND PRINTING OPERATION	8 INCHES	◎	△
	10 INCHES	○	△
	12 INCHES	○	○
	14 INCHES	○	○
	16 INCHES	○	○
	18 INCHES	○	○

**FIG. 22**

